

Supplemental Amendment under 37 C.F.R. § 1.111  
Application No. 10/511,174

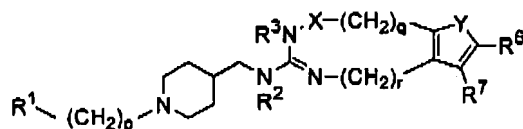
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### AMENDMENTS TO THE CLAIMS

**This listing of claims will replace all prior versions and listings of claims in the application:**

#### **LISTING OF CLAIMS:**

**1. (previously presented):** A compound represented by the following formula (I):



( I )

wherein  $R^1$  represents phenyl,  $C_3$ - $C_8$  cycloalkyl or an aromatic heterocyclic group having 1-3 atoms selected from the group consisting of oxygen, sulfur and nitrogen as hetero atoms,

the phenyl or aromatic heterocyclic group of  $R^1$  may optionally fuse with a benzene ring or aromatic heterocyclic group having 1-3 atoms selected from the group consisting of oxygen, sulfur and nitrogen as hetero atoms to form a fused ring,

the phenyl,  $C_3$ - $C_8$  cycloalkyl or aromatic heterocyclic group, or fused ring, in  $R^1$  may be unsubstituted, or substituted with one or more substituents selected from the group consisting of halogens, hydroxy, cyano, nitro, carboxyl,  $C_1$ - $C_6$  alkyl,  $C_3$ - $C_8$  cycloalkyl,  $C_2$ - $C_6$  alkenyl,  $C_1$ - $C_6$  alkoxy,  $C_1$ - $C_6$  alkylthio,  $C_3$ - $C_5$  alkylene,  $C_2$ - $C_4$  alkyleneoxy,  $C_1$ - $C_3$  alkylenedioxy, phenyl, phenoxy, phenylthio, benzyl, benzyloxy, benzoylamino, formyl,  $C_2$ - $C_7$  alkanoyl,  $C_2$ - $C_7$  alkoxycarbonyl,  $C_2$ - $C_7$  alkanoyloxy,  $C_2$ - $C_7$  alkanoylamino,  $C_1$ - $C_6$  alkylsulfonyl,  $C_3$ - $C_8$  (alkoxycarbonyl)methyl, amino, mono( $C_1$ - $C_6$  alkyl)amino, di( $C_1$ - $C_6$  alkyl)amino, carbamoyl,  $C_2$ - $C_7$  N-alkylcarbamoyl,  $C_4$ - $C_9$  N-cycloalkylcarbamoyl, N-phenylcarbamoyl, piperidylcarbonyl,

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morpholinylcarbonyl, pyrrolidinylcarbonyl, piperazinylcarbonyl, N-methoxycarbamoyl, (formyl)amino and ureido, and

the substituent of the phenyl, C<sub>3</sub>-C<sub>8</sub> cycloalkyl or aromatic heterocyclic group, or fused ring, of R<sup>1</sup> may be unsubstituted, or substituted with one or more substituents selected from the group consisting of C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>2</sub>-C<sub>6</sub> alkenyl, C<sub>2</sub>-C<sub>6</sub> alkynyl, phenyl, C<sub>3</sub>-C<sub>5</sub> alkylene, C<sub>3</sub>-C<sub>8</sub> cycloalkyl, C<sub>3</sub>-C<sub>8</sub> cycloalkenyl, C<sub>1</sub>-C<sub>6</sub> alkoxy, C<sub>1</sub>-C<sub>6</sub> alkylthio, amino, mono(C<sub>1</sub>-C<sub>6</sub> alkyl)amino, di(C<sub>1</sub>-C<sub>6</sub> alkyl)amino, pyrrolidinyl, piperidyl, C<sub>3</sub>-C<sub>7</sub> lactam, carbamoyl, C<sub>2</sub>-C<sub>7</sub> N-alkylcarbamoyl, C<sub>2</sub>-C<sub>7</sub> alkoxycarbonyl, carboxyl, hydroxy, benzoyl, cyano, trifluoromethyl, halogen and *tert*-butoxycarbonylamino,

provided that when R<sup>1</sup> is C<sub>3</sub>-C<sub>8</sub> cycloalkyl, the substituent does not include amino, mono(C<sub>1</sub>-C<sub>6</sub> alkyl)amino or di(C<sub>1</sub>-C<sub>6</sub> alkyl)amino;

p represents an integer of 1-6;

R<sup>2</sup> and R<sup>3</sup> may be the same or different and each independently represents hydrogen, C<sub>1</sub>-C<sub>6</sub> alkyl or phenyl,

where the C<sub>1</sub>-C<sub>6</sub> alkyl or phenyl group of R<sup>2</sup> and R<sup>3</sup> may be unsubstituted, or substituted with one or more substituents selected from the group consisting of halogens, hydroxy, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>2</sub>-C<sub>7</sub> alkoxycarbonyl, amino, carbamoyl, carboxyl, cyano and C<sub>1</sub>-C<sub>6</sub> alkoxy;

X represents -CO-, -SO<sub>2</sub>-, -CH<sub>2</sub>-, -CS- or a single bond;

q represents 0 or 1;

r represents 0 or 1;

Y represents -(R<sup>4</sup>)C=C(R<sup>5</sup>)-, -S- or -NR<sup>8</sup>-;

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$R^4$ ,  $R^5$ ,  $R^6$  and  $R^7$  may be the same or different, and each independently represents hydrogen, a halogen, hydroxy, cyano, nitro, carboxyl,  $C_1$ - $C_6$  alkyl,  $C_3$ - $C_8$  cycloalkyl,  $C_2$ - $C_6$  alkenyl,  $C_1$ - $C_6$  alkoxy,  $C_1$ - $C_6$  alkylthio,  $C_3$ - $C_5$  alkylene,  $C_2$ - $C_4$  alkyleneoxy,  $C_1$ - $C_3$  alkylenedioxy, phenyl, phenoxy, phenylthio, phenylsulfonyl, benzyl, benzyloxy, benzoylamino, formyl,  $C_2$ - $C_7$  alkanoyl,  $C_2$ - $C_7$  alkoxycarbonyl,  $C_2$ - $C_7$  alkanoyloxy,  $C_2$ - $C_7$  alkanoylamino,  $C_4$ - $C_{10}$  cycloalkanoylamino,  $C_3$ - $C_7$  alkenoylamino,  $C_1$ - $C_6$  alkylsulfonyl,  $C_1$ - $C_6$  alkylsulfonylamino,  $C_3$ - $C_8$  (alkoxycarbonyl)methyl, amino, mono( $C_1$ - $C_6$  alkyl)amino, di( $C_1$ - $C_6$  alkyl)amino, carbamoyl,  $C_2$ - $C_7$  N-alkylcarbamoyl,  $C_4$ - $C_9$  N-cycloalkylcarbamoyl, N-phenylcarbamoyl, N-( $C_7$ - $C_{12}$  phenylalkyl)carbamoyl, piperidylcarbonyl, morpholinylcarbonyl, pyrrolidinylcarbonyl, piperazinylcarbonyl, N-methoxycarbamoyl, sulfamoyl,  $C_1$ - $C_6$  N-alkylsulfamoyl, (formyl)amino, (thioformyl)amino, ureido or thioureido,

where the aforementioned groups of  $R^4$ ,  $R^5$ ,  $R^6$  and  $R^7$  each may be independently unsubstituted, or substituted with one or more substituents selected from the group consisting of  $C_1$ - $C_6$  alkyl,  $C_2$ - $C_6$  alkenyl,  $C_2$ - $C_6$  alkynyl, phenyl,  $C_3$ - $C_5$  alkylene,  $C_3$ - $C_8$  cycloalkyl,  $C_3$ - $C_8$  cycloalkenyl,  $C_1$ - $C_6$  alkoxy, ( $C_1$ - $C_6$  alkoxy)( $C_1$ - $C_6$  alkoxy), phenyl( $C_1$ - $C_6$  alkoxy),  $C_1$ - $C_6$  alkylthio, amino, mono( $C_1$ - $C_6$  alkyl)amino, di( $C_1$ - $C_6$  alkyl)amino, pyrrolidinyl, piperidyl, ( $C_2$ - $C_7$  alkanoyl)piperidyl,  $C_3$ - $C_7$  lactam, carbamoyl,  $C_2$ - $C_7$  N-alkylcarbamoyl,  $C_4$ - $C_9$  N-cycloalkylcarbamoyl, N-phenylcarbamoyl, N-( $C_7$ - $C_{12}$  phenylalkyl)carbamoyl,  $C_2$ - $C_7$  alkanoylamino,  $C_2$ - $C_7$  alkoxycarbonyl, carboxyl, hydroxy, benzoyl, cyano, trifluoromethyl, halogens, *tert*-butoxycarbonylamino,  $C_1$ - $C_6$  alkylsulfonyl and heterocycles or aromatic heterocycles (where a heterocycle or aromatic heterocycle has 1-3 atoms selected from the group

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consisting of oxygen, sulfur and nitrogen as hetero atoms, and may be substituted with C<sub>1</sub>-C<sub>6</sub> alkyl); and

R<sup>8</sup> represents hydrogen or C<sub>1</sub>-C<sub>6</sub> alkyl,

where the C<sub>1</sub>-C<sub>6</sub> alkyl group of R<sup>8</sup> may be unsubstituted, or substituted with one or more substituents selected from the group consisting of halogens, hydroxy, cyano, nitro, carboxyl, carbamoyl, mercapto, guanidino, C<sub>3</sub>-C<sub>8</sub> cycloalkyl, C<sub>1</sub>-C<sub>6</sub> alkoxy, C<sub>1</sub>-C<sub>6</sub> alkylthio, phenyl (where phenyl may be substituted, or substituted with one or more substituents selected from the group consisting of halogens, hydroxy, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>1</sub>-C<sub>6</sub> alkoxy and benzyloxy), phenoxy, benzyloxy, benzyloxycarbonyl, C<sub>2</sub>-C<sub>7</sub> alkanoyl, C<sub>2</sub>-C<sub>7</sub> alkoxycarbonyl, C<sub>2</sub>-C<sub>7</sub> alkanoyloxy, C<sub>2</sub>-C<sub>7</sub> alkanoylamino, C<sub>2</sub>-C<sub>7</sub> N-alkylcarbamoyl, C<sub>2</sub>-C<sub>6</sub> alkylsulfonyl, amino, mono(C<sub>1</sub>-C<sub>6</sub> alkyl)amino, di(C<sub>1</sub>-C<sub>6</sub> alkyl)amino and ureido,

a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C<sub>1</sub>-C<sub>6</sub> alkyl adduct thereof.

**2. (original):** A compound according to claim 1, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C<sub>1</sub>-C<sub>6</sub> alkyl adduct thereof, wherein X in formula (I) is -SO<sub>2</sub>-.

**3. (original):** A compound according to claim 1, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C<sub>1</sub>-C<sub>6</sub> alkyl adduct thereof, wherein X in formula (I) is -CO-.

**4. (original):** A compound according to claim 1, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C<sub>1</sub>-C<sub>6</sub> alkyl adduct thereof, wherein X in formula (I) is -CH<sub>2</sub>-.

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**5. (original):** A compound according to claim 1, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C<sub>1</sub>-C<sub>6</sub> alkyl adduct thereof, wherein X in formula (I) is -CS-.

**6. (original):** A compound according to claim 1, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C<sub>1</sub>-C<sub>6</sub> alkyl adduct thereof, wherein X in formula (I) is a single bond.

**7. (original):** A compound according to any one of claims 1 to 6, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C<sub>1</sub>-C<sub>6</sub> alkyl adduct thereof, wherein Y in formula (I) is -(R<sup>4</sup>)C=C(R<sup>5</sup>)-.

**8. (original):** A compound according to any one of claims 1 to 6, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C<sub>1</sub>-C<sub>6</sub> alkyl adduct thereof, wherein Y in formula (I) is -S-.

**9. (original):** A compound according to any one of claims 1 to 6, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C<sub>1</sub>-C<sub>6</sub> alkyl adduct thereof, wherein Y in formula (I) is -NR<sup>6</sup>-.

**10. (previously presented):** A compound according to any one of claims 1 to 6, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C<sub>1</sub>-C<sub>6</sub> alkyl adduct thereof, wherein R<sup>1</sup> in formula (I) is substituted or unsubstituted phenyl.

**11. (previously presented):** A compound according to any one of claims 1 to 6, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C<sub>1</sub>-C<sub>6</sub> alkyl adduct thereof, wherein R<sup>2</sup> in formula (I) is hydrogen.

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**12. (previously presented):** A compound according to any one of claims 1 to 6, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C<sub>1</sub>-C<sub>6</sub> alkyl adduct thereof, wherein R<sup>3</sup> in formula (I) is hydrogen.

**13. (previously presented):** A compound according to any one of claims 1 to 6, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C<sub>1</sub>-C<sub>6</sub> alkyl adduct thereof, wherein q=0 and r=0 in formula (I).

**14. (previously presented):** A compound according to any one of claims 1 to 6, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C<sub>1</sub>-C<sub>6</sub> alkyl adduct thereof, wherein q=1 and r=0 in formula (I).

**15. (previously presented):** A compound according to any one of claims 1 to 6, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C<sub>1</sub>-C<sub>6</sub> alkyl adduct thereof, wherein q=0 and r=1 in formula (I).

**16. (previously presented):** A compound according to any one of claims 1 to 6, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C<sub>1</sub>-C<sub>6</sub> alkyl adduct thereof, wherein p=1 in formula (I).

**17. (original):** A compound according to claim 2, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C<sub>1</sub>-C<sub>6</sub> alkyl adduct thereof, wherein Y is - (R<sup>4</sup>)C=C(R<sup>5</sup>)-, R<sup>1</sup> is substituted or unsubstituted phenyl, R<sup>2</sup> is hydrogen, R<sup>3</sup> is hydrogen, q=0, r=0 and p=1 in formula (I).

**18. (original):** A compound according to claim 3, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C<sub>1</sub>-C<sub>6</sub> alkyl adduct thereof, wherein Y is -

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$(R^4)C=C(R^5)-$ ,  $R^1$  is substituted or unsubstituted phenyl,  $R^2$  is hydrogen,  $R^3$  is hydrogen,  $q=0$ ,  $r=0$  and  $p=1$  in formula (I).

**19. (original):** A compound according to claim 4, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable  $C_1$ - $C_6$  alkyl adduct thereof, wherein Y is -  $(R^4)C=C(R^5)-$ ,  $R^1$  is substituted or unsubstituted phenyl,  $R^2$  is hydrogen,  $R^3$  is hydrogen,  $q=0$ ,  $r=0$  and  $p=1$  in formula (I).

**20. (original):** A compound according to claim 6, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable  $C_1$ - $C_6$  alkyl adduct thereof, wherein Y is -  $(R^4)C=C(R^5)-$ ,  $R^1$  is substituted or unsubstituted phenyl,  $R^2$  is hydrogen,  $R^3$  is hydrogen,  $q=0$ ,  $r=0$  and  $p=1$  in formula (I).

**21. (original):** A compound according to any one of claims 17 to 20, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable  $C_1$ - $C_6$  alkyl adduct thereof, wherein  $R^4$  and  $R^5$  in formula (I) may be the same or different and each is independently hydrogen, a halogen, hydroxy, cyano, nitro, carboxyl,  $C_1$ - $C_6$  alkyl,  $C_1$ - $C_6$  alkoxy,  $C_2$ - $C_7$  alkoxycarbonyl,  $C_2$ - $C_7$  alkanoylamino,  $C_1$ - $C_6$  alkylsulfonyl, amino, carbamoyl,  $C_2$ - $C_7$  N-alkylcarbamoyl, sulfamoyl or  $C_1$ - $C_6$  N-alkylsulfamoyl.

**22. (original):** A compound according to any one of claims 17 to 20, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable  $C_1$ - $C_6$  alkyl adduct thereof, wherein  $R^4$  and  $R^5$  in formula (I) may be the same or different and each is independently a halogen, hydroxy, cyano, nitro,  $C_1$ - $C_6$  alkyl,  $C_1$ - $C_6$  alkoxy,  $C_2$ - $C_7$  alkoxycarbonyl,  $C_1$ - $C_6$  alkylsulfonyl or  $C_1$ - $C_6$  N-alkylsulfamoyl.

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**23. (previously presented):** A compound according to any one of claims 17 to 20, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C<sub>1</sub>-C<sub>6</sub> alkyl adduct thereof, wherein the substituents of R<sup>1</sup> in formula (I) above may be the same or different and is independently a halogen, hydroxy, cyano, nitro, C<sub>1</sub>-C<sub>6</sub> alkyl or C<sub>1</sub>-C<sub>6</sub> alkoxy.

**24. (previously presented):** A pharmaceutical composition with CCR3 antagonism, which comprises as an effective ingredient thereof a compound represented by formula (I) above according to any one of claims 1 to 6, a pharmaceutically acceptable acid adduct thereof or a pharmaceutically acceptable C<sub>1</sub>-C<sub>6</sub> alkyl adduct thereof; and a pharmaceutically acceptable carrier.

**25. (currently amended):** A method for treatment of a disease or condition selected from the group consisting of bronchial asthma, allergic rhinitis, atopic dermatitis, urticaria, contact dermatitis, allergic conjunctivitis, inflammatory bowel disease, Acquired Immune Deficiency Syndrome, eosinophilia, eosinophilic gastroenteritis, eosinophilic enteropathy, eosinophilic fasciitis, eosinophilic granuloma, eosinophilic pustular folliculitis, eosinophilic pneumonia and eosinophilic leukemia prophylaxis and/or treatment of a disease associated with CCR3, which ~~comprises~~ comprising administering an effective amount of a compound represented by formula (I) according to any one of claims 1 to 6, a pharmaceutically acceptable acid adduct thereof or a pharmaceutically acceptable C<sub>1</sub>-C<sub>6</sub> alkyl adduct thereof.

**26 - 30 (canceled).**